Amendments to the Claims:

Please amend the claims as indicated below.

Please cancel claims 28, 29 and 31 without prejudice.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-20 (canceled)

Claim 21 (currently amended): An optical device for ~~combining~~ adjusting a first light beam ~~and at least one second light beam~~, the optical device comprising:

a first beam splitting device configured to split a first reference beam from the first light beam ~~and a second reference beam from the second light beam~~;

a second beam splitting device configured to split a ~~third~~ second reference beam from the first light beam ~~and a fourth reference beam from the second light beam~~; ~~and~~

a position detector configured to detect respective positions of the reference beams; and

a control element configured to adjust a propagation direction of the first light beam ~~so as to enable at least one of a respective propagation direction and a respective position of at least one of the first and second light beams to be adjusted~~ as a function of ~~at least one of~~ the detected respective positions of the reference beams.

Claim 22 (previously presented): The optical device as recited in claim 21 wherein the first and second light beams each have a different respective wavelength.

Claim 23 (previously presented): The optical device as recited in claim 21 wherein the first beam splitting device includes a first interface, and the second beam splitting device includes a

second interface.

Claim 24 (previously presented): The optical device as recited in claim 21 further comprising at least one dispersive element.

Claim 25 (previously presented): The optical device as recited in claim 24 wherein the dispersive element includes at least one of a prism, a grating, and an acousto-optical element.

Claim 26 (previously presented): The optical device as recited in claim 21 wherein the first and second beam splitting devices are parts of a same optical component.

Claim 27 (previously presented): The optical device as recited in claim 26 wherein the same optical component includes a dispersive element.

Claim 28 (canceled)

Claim 29 (canceled)

Claim 30 (currently amended): The optical device as recited in claim ~~29~~ 21 wherein the ~~at least one~~ control element includes a tilting mirror.

Claim 31 (canceled)

Claim 32 (currently amended): The optical device as recited in claim ~~29~~ 21 wherein the ~~at least one~~ control element is disposed upstream of the first beam splitting device.

Claim 33 (currently amended): The optical device as recited in claim 23 ~~further comprising at least one~~ wherein the control element is configured to adjust ~~a respective~~ an angle of incidence of ~~at~~

~~least one of~~ the first ~~and second~~ light beam on the first interface.

Claim 34 (currently amended): The optical device as recited in claim 23 ~~further comprising at least one~~ wherein the control element is configured to adjust a ~~respective~~ striking location of ~~at least one of~~ the first ~~and second light beams~~ beam on the first interface.

Claim 35 (previously presented): The optical device as recited in claim 21 wherein the position detector includes a CCD detector.

Claim 36 (previously presented): The optical device as recited in claim 21 wherein the position detector includes a first detector configured to detect the respective position of each of the reference beams.

Claim 37 (previously presented): The optical device as recited in claim 21 wherein the position detector is configured to simultaneously detect the reference beams.

Claim 38 (previously presented): The optical device as recited in claim 21 wherein the position detector is configured to be calibrated for different respective detectable positions of the reference beams.

Claim 39 (currently amended): A method for generating an illuminating light beam for a scanning microscope, the method comprising:

splitting a first reference beam from a first light beam ~~and a second reference beam from a second light beam~~ using a first beam splitting device;

splitting a ~~third~~ second reference beam from the first light beam ~~and a fourth reference beam from the second light beam~~ using a second beam splitting device;

detecting a respective positions of the reference beams using a position detector; and

adjusting ~~at least one of~~ a ~~respective~~ propagation direction ~~and a respective position of at~~

~~least one of the first and second light beams~~ of the first light beam as a function of ~~at least one of~~ the detected respective positions of the reference beams.

Claim 40 (currently amended): A scanning microscope comprising an optical device for combining a first light beam and at least one second light beam, the optical device comprising:

a first beam splitting device configured to split a first reference beam from the first light beam and a second reference beam from the second light beam;

a second beam splitting device configured to split a third reference beam from the first light beam and a fourth reference beam from the second light beam; and

a position detector configured to detect respective positions of the reference beams;

a control element configured to adjust a respective propagation direction of the first and second light beams ~~so as to enable at least one of a respective propagation direction and a respective position of at least one of the first and second light beams to be adjusted~~ as a function of ~~at least one of~~ the detected respective positions of the reference beams.